Amendments to the Claims:

1. (Currently Amended) A method of linking control transfer information with sampling information for instructions executing in a processor comprising:

storing information relating execution events in a history queue having a plurality of entries and storing ~~including at least~~ one or more program counter values [[for a]] corresponding to one or more control transfer events;

selecting an instruction for sampling that is not a control transfer event;

storing information relating to the instruction for sampling;

freezing the information relating to execution events in the history queue when the information relating to the instruction for sampling is to be reported to provide frozen execution event information;

reporting the information relating to the instruction for sampling; and,

enabling access to the frozen execution event information in the history queue.

2. (Original) The method of claim 1 further comprising:

freezing the execution event information provides information to enable reconstructing an execution path of events adjoining the instruction.

3. (Original) The method of claim 1 wherein:

the storing information relating to execution events and the storing information relating to the instruction occur within separate structures of a processor.

4. (Original) The method of claim 1 wherein:

the freezing the information relating to execution events disables storing of additional information relating to execution events.

5. (Original) The method of claim 1 further comprising:

enabling storing information relating to execution events occurring after execution of the instruction for sampling.

6. (Currently Amended) An apparatus for linking control transfer information with sampling information for instructions executing in a processor comprising:

means for storing information relating to execution events in a history queue having a plurality of entries and storing ~~including at least~~ one or more program counter values [[for a]] corresponding to one or more control transfer events;

means for selecting an instruction for sampling that is not a control transfer event;

means for storing information relating to the instruction;

means for freezing the information relating to execution events in the history queue when the information relating to the instruction for sampling is to be reported to provide frozen execution event information;

means for reporting the information relating to the instruction; and,

means for enabling access to the frozen execution event information in the history queue.

7. (Original) The apparatus of claim 6 wherein:

means for freezing the execution event information provides information to enable reconstructing an execution path of events adjoining the instruction.

8. (Original) The apparatus of claim 6 wherein:

the means for storing information relating to execution events and the means for storing information relating to the instruction are located within separate modules of a processor.

9. (Original) The apparatus of claim 6 wherein:

the freezing the information relating to execution events disables storing of additional information relating to execution events.

10. (Original) The apparatus of claim 6 further comprising:

means for enabling storing information relating to execution events occurring after execution of the instruction for sampling.

11. (Currently Amended) A processor comprising:

an instruction pipeline;

a sampling mechanism coupled to the instruction pipeline, the sampling mechanism selecting an instruction for sampling that is not a control transfer event and storing information relating to the instruction for sampling;

a history queue coupled to the pipeline, the history queue having a plurality of entries and storing information relating to execution events including ~~at least~~ one or more program counter values [[for a]] corresponding to one or more control transfer events, the history queue freezing the information relating to execution events when the information relating to the instruction for sampling is to be reported to provide frozen execution event information so as to enable linking control transfer information with sampling information for instructions executing in the processor.

12. (Original) The processor of claim 11 wherein:

the sampling mechanism reports the information relating to the instruction for sampling.

13. (Original) The processor of claim 11 wherein:

the history queue enables access to the frozen execution event information.

14. (Original) The processor of claim 11 wherein:

freezing the execution event information provides information to enable reconstructing an execution path of events adjoining the instruction.

15. (Original) The processor of claim 11 wherein:

freezing the information relating to execution events disables storing of additional information relating to execution events.

16. (Original) The processor of claim 11 wherein:

the history queue stores information relating to execution events occurring after execution of the instruction for sampling.

17. (Currently Amended) A method of monitoring control transfer information for an instruction[[s]] executing in a processor comprising:

storing information relating to execution events in a history queue having a plurality of entries and storing ~~including at least~~ one or more program counter values [[for a]] corresponding to one or more control transfer events;

freezing the information relating to execution events in the history queue when the information relating to the instruction that is not an execution event is to be reported to provide frozen execution event information; and,

enabling access to the frozen execution event information in the history queue.

18. (Original) The method of claim 17 wherein:

the freezing occurs based upon an instruction sample being reported.

19. (Previously Presented) The method of claim 1 wherein the control transfer event is selected from the group consisting of control transfer instruction resolved taken, instruction flush performed, and instruction trap taken.